

# CROSS-HUDSON BRIDGE AND TUNNEL GET NEW IMPETUS

## Both Mean Great Saving of Time When Present Traffic Delays Are Gone

The matter of bridge and vehicular tunnel connections between New York and New Jersey has taken form of late as a serious and feasible plan. It must be confessed that some years ago when the suggestion first was made and the Legislature of both States appointed commissions to consider the plan, it did look like a dream rather than a possibility. However, since the Hudson has been tunneled for the railroad system the vehicular tunnel looks more like an actuality.

There is great need of both the cross Hudson bridge and tunnel, although their construction will mean a total expense of \$63,000,000. An enormous amount of goods is carried annually across the river by ferries and in lighters, subject to manifold delays and needing to be transhipped by means of several loadings in the course of being delivered. When there is a heavy rush of traffic the ferries quickly fill up and last comes are held up. In bad weather the boats are subject to delay. Anyway, the tendency is to cut down service on the boats.

This is where the motor vehicle user is interested. The tunnel and the bridge will mean a direct run from the point of departure to the destination, a saving in time and in handling. This also means much to the consumer, because more expeditious methods mean lower costs.

It is not alone to the business man that the bridge and tunnel project is important. The bridge will mean a reader access to parts of New Jersey where living is cheaper and will afford an outlet to a crowded population, which every year sees growing denser on Manhattan Island. So, too, many Jersey men will find it easier to get into New York and will more readily enter that attractive market. Both communities will benefit.

At the Automobile Club of America last Wednesday there was detailed discussion of the bridge and tunnel plan. George H. Duck, president of the Motor Truck Club of America, introduced the speakers, who included Senator Martin Saxe of New York, Senator J. C. Johnson of New Jersey, Henry W. Dodge of Beller, Dodge & Baird, bridge engineers, and J. D. Snyder of Jacobs & Davies, tunnel engineers.

"In the past seven years," said Senator Saxe, "the commissions of the two States have carefully studied the proposition and concluded that the desirable solution is a vehicular tunnel in the neighborhood of Canal street, Jersey City, and a highway bridge in the neighborhood of Fifty-seventh street. The tunnel is estimated by the engineers to cost \$11,000,000 and the bridge \$42,000,000. Practically all questions relating to both enterprises have been solved with the exception of finance.

"In New Jersey legislation is now pending which will run the bridge and tunnel to join together and bond themselves for the purpose of providing one-half of the funds. In New York a constitutional amendment has been introduced providing for the creation of a State debt of \$25,000,000. In view of the fact that the highway system of the State is practically all west of the Hudson River it is the manifest duty of the State to link up the highway system with the streets of New York, and that can now be done with New Jersey paying half the expense of such a link."

"Of the \$50,000,000 recently appropriated for highway improvement in the State of New York the city is contributing approximately 75 per cent, and receiving no direct benefit within its confines. For some time to come the finances of the city will be such that the municipality cannot undertake the expense of this great public work. The New York commission shortly expects to enter upon a series of conferences with the Board of Estimate and Apportionment of the city of New York in the hope that something practical may be worked out for submission to the Legislature.

"The bridge," said Mr. Dodge in outlining that branch of the enterprise, "will be the greatest artery of traffic coming into New York City. It will be equipped to carry two tracks for subway trains,

# FINDS INTEREST STRONG IN NEW LOZIER MOTOR

## Competing Engineers See Something to Look At, Says Harry S. Houp.

"The interest displayed in the new Lozier motor by competing engineers," says Harry S. Houp, "is a pretty good indication that we have something good. These gentlemen scrutinize a power plant some what closer and more intelligently than the average purchaser. As a matter of fact no engine is coming in for more attention than the mountain climbing type motor of the new Lozier light four. It is a power plant that we are proud of and one that is respected by our competitors.

"Heretofore the Lozier has been more or less an exclusive quality proposition practically hand built and naturally in small numbers. With the advent of the new light four also comes a new policy of production which places it in the very desirable \$2,000 class. That this policy is right is shown by the sales made since the first of the year.

"By building the new light four in such numbers that the low price is possible I believe the Lozier company is two years ahead of its competitors."

# AUTOMOBILE SECURITIES.

	Bid.	Asked.
Alex-Grieb Rubber Co. ....	200	200
Alex-Grieb Rubber Co. ....	99	102
Aluminum Castings Co. ....	98	100
Chalmers Motor Co. ....	99	100
Chalmers Motor Co. ....	99	100
Firestone Tire and Rubber Co. ....	284	290
Firestone Tire and Rubber Co. ....	108 1/2	110
Garford Co. ....	90	90
General Motors Co. ....	24 1/2	25
General Motors Co. ....	52	53
B F Goodrich Co. ....	22 1/2	23 1/2
B F Goodrich Co. ....	87	90
Goodyear Tire and Rubber Co. ....	150	150
Goodyear Tire and Rubber Co. ....	15 1/2	15 1/2
Gray & Davis Co. ....	90	97
International Motor Co. ....	5	5
International Motor Co. ....	15	15
Kelly-Springfield Tire Co. ....	58 1/2	59 1/2
Kelly-Springfield Tire Co. ....	140	145
Lozier Motor Co. ....	13	15
Lozier Motor Co. ....	65	65
Maxwell Motor Co. ....	84	84
Maxwell Motor Co. ....	125 1/2	125 1/2
Maxwell Motor Co. ....	33	34
Miller Rubber Co. ....	128	133
Packard Motor Co. ....	101	116
Packard Motor Co. ....	85	98
Portage Rubber Co. ....	35	35
Portage Rubber Co. ....	30	30
Pierce Motor Co. ....	8	8 1/2
Pope Manufacturing Co. ....	1	1
Pope Manufacturing Co. ....	13	17
Portage Rubber Co. ....	35	35
Portage Rubber Co. ....	30	30
Reo Motor Truck Co. ....	8	8 1/2
Reo Motor Truck Co. ....	10	10 1/2
Stewart-Warner Speedometer Co. ....	26 1/2	27 1/2
Stewart-Warner Speedometer Co. ....	101	101
Studebaker Co. ....	28	29
Studebaker Co. ....	28	29
Swinchart Tire Co. ....	69 1/2	69 1/2
U S Rubber Co. ....	61	61 1/2
U S Rubber Co. ....	102	103
White Co. ....	107	110
Willys-Overland Co. ....	67	67
Willys-Overland Co. ....	91	91

Here's a Marmion a Dozen Years Old

# Cold but the Hudson Makes Its Journey Through



A photograph sent in by the Freeman Company, Hudson distributors at Edmonton, Alberta, shows a Hudson car which made an 800 mile trip to Peace River Crossing standing on the ice of Lesser Slave Lake. The five men who made the trip are shown engaged in catching fish through the ice. An interesting bit of detail was that the car stood outdoors—of course—each night during the trip. The radiator was filled with kerosene instead of water, because frequently the thermometer was 15 below zero. Yet the electric self-cranker never failed to start the car.

# Packards Are at Work in Mexico

JULIO MADERO, a brother of the late President of Mexico, recently gave a Packard six cylinder car to Gen. Obregon, commander of the northern division of Carranza's troops. Madero bought the car from the Packard dealer in Phoenix, Ariz. Gen. Pancho Villa also uses a Packard. The tonneau of the touring body has been equipped with special auxiliary seats for members of the staff.

More than fifty Packard vehicles are operated by the Federal Government in Mexico. The roads in Mexico are notoriously bad, however.

# SOLD CARS AT BOSTON.

More Than Expected Marketed at Boston, Says McCausland.

"The sale of KisselKars at the Boston show, which by the way surpassed New York and Chicago in the number of exhibitors, was far and away beyond expectations," says C. H. McCausland. "Not only were many dealers added to the New England representation, but a great number of retail sales were closed.

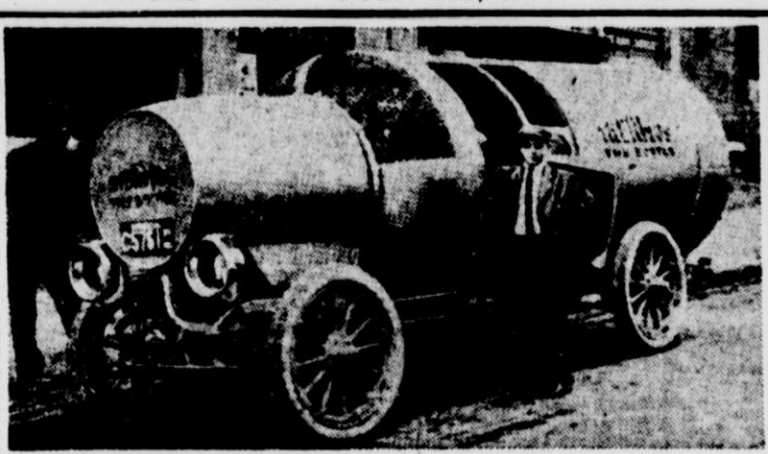
"This situation is fairly typical of the interest in this year's KisselKars models throughout the country. I think this is largely due to the fact that there is nothing experimental, no mechanical innovations not yet proved practicable."

# COMFORT IS THE ISSUE.

Moline-Knight Has Features Designed to This End.

"Comfort for the driver has been a paramount issue in designing the Moline-Knight."

# "Bottle Car" Uses Republic Shoes



This picture shows the \$15,000 advertising car, shaped like a Thermos bottle, which visited cities all through the East the past two years. It is shod all round with Republic Stagnards, which the driver says gave fine service.

# GEAR SHIFT BY "WIRE."

Electric Change Speed Is Regarded as Great Improvement.

"When it was announced that the electromagnet was successfully applied to shifting gears on the Haynes," says E. W. Headington, manager of the Haynes New York branch, "the motoring public were naturally quick to grasp its advantages and before long the electric gear shift was heralded as the greatest automobile improvement in recent years.

"On the Haynes steering wheel there is a dial of push buttons called the 'selector' switch. These buttons control the operation of a set of electromagnets, one for each speed and one for reverse. To the clutch pedal is connected a small mechanical master switch which completes the circuit to the battery for energizing the electromagnets.

"To shift gears you select the desired speed through the 'selector' switch, complete the circuit by depressing the clutch pedal and the instant it is released the gears are shifted so that there is no possibility of stripping a gear or wrecking a transmission.

"After you understand the mechanical construction of the electric gear shifting mechanism you marvel at its simplicity and wonder why it was not perfected long ago. As a matter of fact engineers have been working on this device for a period of six years, before the Haynes company finally decided to adopt it as standard equipment."

Knight," says J. W. DeLamater, New York representative for this car. "The front part of the body has plenty of leg room; the seats are set low, but with sufficient height to make riding comfortable; the three centre control levers are of a length that can be manipulated handily, the foot pedals are adjustable to suit varying leg measurements, the speedometer, clock, gauges and other instruments are so arranged that they are readily discernible at night as illuminated by an electric light.

"With these features, and together with a push button at the top of the steering post for sounding the electric horn, half elliptic front and rear springs of unusual length, pockets on both front doors, tool box under the front seat, two cylinder pump and other driver comforts, the man behind the wheel is as comfortable as though he was resting in a Turkish rocker at home or at the club."

# Trade Does in Motor Car World

Col. K. C. Pardee, for many years prominently identified with the automobile trade in New York, has announced his retirement on account of failing health. For the past year he has been handling the Havers cars in the metropolitan territory.

The Havers sales agency and service department will be run by Walter K. Hadley Company, at 1860 Broadway, as usual. Hadley is the general sales manager of the Havers Motor Car Company of Port Huron, Mich., the manufacturers of the Havers Six. In the future he will make his headquarters in New York.

The F. T. Sanford Automobile Company has taken over the representation of Kelly Springfield motor trucks for New York State, New Jersey and Connecticut. The new company is being formed with Francis T. Sanford as president. Local agents are being appointed in the principal towns and cities of the States named.

After a service of more than twenty years in charge of the Studebaker interests in the Inter-Mountain territory, Charles A. Quigley has resigned as manager of the Salt Lake branch and has taken a distributing contract for the Studebaker automobile line for the entire region.

Arthur Waterman, who has been made general manager and vice-president of the Hartford Suspension Company, was connected for years with this same company until about a year ago, when he took charge of another manufacturing enterprise. This company is the pioneer of the shock absorber business. Edward V. Hartford, president of the company, was one of the first to realize the need of a device to control the action of the springs to insure easy riding.

Waterman has been with him from the time the device was first on the market as manager of the sales and advertising departments. Marketing a shock absorber was not an easy task years ago. The automobile owner of to-day almost takes it for granted that a shock absorber is necessary, but in those days he first had to be educated to the fact that he needed them and then had to be sold.

# TO SHOW HOW WHEELS AFFECT WEAR OF TIRES

Official A. C. A. Test Will Use Both Wire and Wooden Wheels.

An elaborate road test by the testing laboratory of the Automobile Club of America will shortly be undertaken with a view to showing the relative effect of wooden and wire wheels upon the wear of two sets of Pennsylvania tires. One set of tires is to be fitted to a four cylinder 1914 Lozier car, equipped with the wooden wheels regularly furnished by the manufacturers, and the second set is to be fitted to a second car which will be a duplicate of the first in all particulars except the wheels, which will be probably Rudge-Whitworth type.

These two cars will be driven an average of about 125 miles a day for a period of several weeks. Each car will be continually in charge of an official observer, acting under the direction of the club's technical committee and Mr. Chase, engineer for the club. The cars will report at the club each night, where they will remain under lock and key after being properly cleaned of passengers or equivalent ballast, but the number of passengers will be changed from time to time so that the conditions under which the cars are operated will approximate as nearly as possible the actual conditions under which the average car is operated in normal use.

The next day the cars will travel the same course, but the one which followed on the first day will lead, while the leader on the first day will follow. The drivers will also be interchanged, so that the man who drove the car with the wooden wheels on the first day will drive the wire wheeled car on the second day. On many days of these trips the cars will carry a full complement of passengers or equivalent ballast, but the number of passengers will be changed from time to time so that the conditions under which the cars are operated will approximate as nearly as possible the actual conditions under which the average car is operated in normal use.

Careful note will be made of the distance covered by each tire, and of the conditions of each at various times during the run. At the end of the test a report will be published by the club giving a record of all happenings of moment affecting the wear during the test and of the mileage covered by each tire during its useful life. The Pennsylvania Rubber Company applied to the club to make the test.

# MAIL MAN DEFIES THEM.

Says He'll Motor on Nantucket Island, Whether or No.

The island of Nantucket, off the coast of Massachusetts, is in a furor these days because of what is regarded as a daring violation of "the statutes made and provided." A merry legal war is occupying the attention of the courts simply because Clinton S. Folger, a mail carrier, likes motoring.

The trouble, in which Folger has thus far been victorious, dates back several months to the time when the mail carrier bought a 1914 model Overland touring car in Boston. Although automobiles have been rigorously denied admission to the island, Mr. Folger brought his new purchase home and started it off again. In the opinion of the time he has spent in court, been delivering mail in it. The officials of the island were much wrought up when Citizen Folger transgressed by introducing his gasoline car in the hitherto sacred precincts. They remonstrated with him, but he refused to give up his mail carrier, but to no avail. He made it clear that his citizenship entitled him to deliver mail in any sort of a vehicle he saw fit.

Seeing that words were useless, a big delegation of Nantucket citizens travelled to Boston and had the Massachusetts Highway Commission pass an exclusion law prohibiting the use of motor cars on the island. But Folger kept right on driving his Overland. Then the island officials put their heads together and decided to ask for an injunction. But there was nothing doing. The injunction was refused. Another conference, and the Selectmen cited Folger into court. He was fined \$15 for violating the exclusion act, but immediately appealed.

The next sitting of the Superior Court for the district is in July, so Folger, with a forbidding glance for his opponents, climbed into his car and started it off again before starting on his mail route, however, Mr. Folger announced that he would see the case through to the end, promising to take it to the Federal Supreme Court at Washington if such procedure required ten years. Meanwhile, he announced, he would continue to drive his car.

Though a considerable amount of ill feeling has been stirred up by the case, Folger is in no way vindictive, for on the day he was cited to appear in court he gave one of the Selectmen a ride and after the trial took Chief of Police Gibbs on a little joy ride to Siasconnet. The Selectmen have decided that about the only way to get Folger's Overland off the island is to capture it some dark night and dump it overboard where the water is deep.

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# Firestone Makes Cycle Tires.

Recognizing the cycle car and the importance of the motorcycle industry, the Firestone Tire and Rubber Company hereafter will market cycle tires. The tires will be in four sizes, 28x2 1/2, 28x2 3/4, 28x3 and 28x3 1/2 and may be had with either a Firestone non-skid tread or a new corrugated tread. Red as well as gray tubes will be made to fit all sizes. The company is manufacturing the tires after two years of experimenting and submitting the new product to actual road tests in and about Akron.

# BUICK PLANT ONE OF "MAGNIFICENT DISTANCES"

## Takes a Couple of Days at Least to See All There Is to This Factory

To see the Buick plant at Flint properly means a couple of days at least. That is the impression got from putting in several hours wandering through shop after shop and then being told that only a tiny part of the plant had been covered. Almost every one interested in automobiles has heard that the Buick has the largest single plant in this country, or the world for that matter, but it takes seeing to prove this in so. After having visited Flint—which is worth the two and a half hour trolley trip from Detroit—one comes away with an entirely new impression of the Buick car and a feeling of pride in American accomplishment in doing things on such a scale. It isn't that the Buick is the biggest builder of cars in the country. Its total of 32,000 passenger cars for 1914 isn't the biggest by many cars. But it's the factory and the organization that does it which earns attention.

Flint is a town of 45,000 inhabitants, which was most of its importance to Buick. That concern employs 5,000 men and has a payroll of \$406,646 a month. The floor space is fifty-eight acres, and the entire grounds cover something like 160 acres. The output is 145 motor cars a day.

A visitor to the plant is shown through a labyrinth of belts, machinery and men, huge forge hammers, with men bare to the waist, gear cutters, stock rooms and warehouses. He sees the Buick in all stages of deshabille.

The facts give the best idea of the scale on which the business is run: First, there is the \$6,000,000 a year paid to Buick by the Government for the army company puts out 150 cars a day. It means \$17,250 that day, and every day, for tires, approximately \$175,000 a year. The floor space for the same output cost \$30,000 a day; tires, \$20,000 a day; radiators, \$4,000 a day; paint, \$3,500 a day, and so on down the entire line.

Two million nine hundred and seventy-three thousand three hundred square feet of leather go into trimmings, a total of \$788,322, or \$2,661 a day. It will take nearly 24,000 tons of steel at possibly an average of \$42 a ton market, a grand total of \$1,012,800 a year, or \$1,775 a day. There is \$1,497,868 worth of copper and much aluminum, which is fast taking the place of steel in body manufacture. This is estimated at something like \$1,600,000, or to be a little more exact, \$1,355,240. The east iron runs up into money too, 6,215 tons at a valuation of \$459,870, or \$1,331 a day.

Some one with an analytical frame of mind in the purchase department figured out that if the 2,013 tons of steel used during the year were laid out in a string a foot wide it would make a path 708 miles long, 17 miles from the distance from Detroit to New York.

Four switch engines are kept busy a day and two all night shunting cars and making up trains in the Buick yards. Three transfer cars are kept at the motor building for loading during the day, and at night they are rolled up to the dock at the assembly plants.

In handling the cartage the movements of trucks for all interfactory and downtown deliveries is controlled by a dispatcher who operates much the same system as a train dispatcher. He sits all day long, a telephone receiver clamped to his left ear, directing the drivers from one loading station to the next. It is estimated that this method saves the company about \$100,000 a year. There are twenty-two motor trucks and ten horse drawn wagons always on the job. The motor wagons take care of the regular work and the horse equipment gathers up and dumps the odds and ends, technically designated as junk.

The company management has a hobby. It is light, ventilation and sanitation for the men. Each factory has its own lunch room, its own bathhouse and its own fountain bubbling with water from the company's own artesian wells. There is an ambulance service, a complete system of employees' insurance and downtown clubrooms for social enjoyment in the evening.

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The company management has a hobby. It is light, ventilation and sanitation for the men. Each factory has its own lunch room, its own bathhouse and its own fountain bubbling with water from the company's own artesian wells. There is an ambulance service, a complete system of employees' insurance and downtown clubrooms for social enjoyment in the evening.

Some one with an analytical frame of mind in the purchase department figured out that if the 2,013 tons of steel used during the year were laid out in a string a foot wide it would make a path 708 miles long, 17 miles from the distance from Detroit to New York.

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